## DOPED LIF MONOCHROMATOR FOR X-RAY ANALYSIS

## ABSTRACT

The invention relates to a crystalline lithium fluoride doped with at least 0.018 mol per kg of a divalent positive ion M present in the fluoride state, in particular of the single-crystal type. The ion may be  $\mathrm{Mg^{2+}}$ ,  $\mathrm{Zn^{2+}}$  or  $\mathrm{Co^{2+}}$ . This fluoride has a high reflectivity and intense radiation that can emanate therefrom may be effectively received by a fast light scintillator, especially of the rare-earth halide type. It is particularly useful as a monochromator for X-ray fluorescence radiation for the purpose of elemental analysis.